

REMARKS

Claims 16 to 18, 22 to 25 and 28 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the application. Claims 16, 17 and 22 to 25 were rejected under 35 U.S.C. §102(b) as being anticipated by Christiansen et al. (U.S. 5,490,191). Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Christiansen et al. (U.S. 5,490,191) in view of Matzner et al. (U.S. 5, 384, 814).

Claims 16 and 24 have been amended.

Claims 19 to 21, 26 to 27 and 29 to 31 have been withdrawn without traverse.

Reconsideration of the application based on the following remarks is respectfully requested.

35 U.S.C. 112 Rejections

Claims 16 to 18, 22 to 25 and 28 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the application.

Claims 16 and 24 have been amended in response to the Office Action.

Withdrawal of the rejection of claims 16 to 18, 22 to 25 and 28 under 35 U.S.C. §112, second paragraph, is respectfully requested.

35 U.S.C. 102(b) Rejections

Claims 16, 17 and 22 to 25 were rejected under 35 U.S.C. §102(b) as being anticipated by Christiansen et al. (U.S. 5,490,191).

Christiansen et al. discloses a boiling water reactor fuel assembly.

Claim 16 has been amended to recite “a terminal end-piece for a fuel assembly of a nuclear reactor, the assembly comprising fuel rods and a skeleton for supporting the fuel rods, the fuel rods extending in a longitudinal direction and being arranged at nodes of a substantially regular network, the support skeleton comprising two terminal end-pieces and elements for connecting the terminal end-pieces, the fuel rods being arranged longitudinally between the terminal end-pieces, comprising:

an arrangement for laterally maintaining adjacent longitudinal ends of substantially all the fuel rods, the arrangement configured at nodes of the substantially regular network, wherein the maintenance arrangement constitutes an arrangement for longitudinally securing the adjacent longitudinal ends of the fuel rods relative to the terminal end-piece, and wherein the end-piece comprises two components for longitudinally clamping the adjacent longitudinal ends of the fuel rods between the two components.”

Christiansen et al. fails to teach or show “wherein the maintenance arrangement constitutes an arrangement for longitudinally securing the adjacent longitudinal ends of the fuel rods relative to the terminal end-piece, and wherein the end-piece comprises two components for longitudinally clamping the adjacent longitudinal ends of the fuel rods between the two components,” as recited in claim 16. The asserted terminal end piece, lower tie plate 54 and spring element 55 of Christiansen, laterally clamp the longitudinal ends of the fuel rods. “The fuel rods have been extended down into the lowered fuel rod support plate and are restrained laterally by springs.” (Col 5, lines 1 to 3). “All of the other fuel rods of the fuel assembly can similarly be laterally restrained by springs within bores in the support plate.” (Col. 4, lines 61 to 63). Therefore Christiansen fails to show “an arrangement for longitudinally securing” and “for longitudinally clamping” as recited in claim 16.

That the ends are not longitudinally secured is further clear from the fact that the fuel rods are free to move longitudinally. (Column 1, lines 28 to 33).

Withdrawal of the rejection of independent claim 16 under 35 U.S.C. §102 and dependent claims 17 and 22 to 25 is respectfully requested.

With regard to claim 23, which recites “the end piece further comprises feet for support on a lower plate of the core of the nuclear reactor.” Christiansen et al. fails to teach or show such a limitation. The asserted legs 54a and 54b are not “feet for support.” 54b is the bottom of an inlet nozzle.

With regard to claim 24, which partially recites “the maintenance arrangement constitutes an arrangement for longitudinally securing the adjacent longitudinal ends of the fuel rods relative to the terminal end-piece, and wherein the end-piece comprises two components that longitudinally clamp between the components the adjacent longitudinal ends of the fuel rods.” As discussed above Christiansen et al. fails to teach or show “longitudinal securing the adjacent longitudinal ends of the fuel rods relative to the terminal end piece,”

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and “the end piece comprises two components that longitudinally clamp between the components the adjacent longitudinal ends of the fuel rods.” The asserted terminal end piece, lower tie plate 54 and spring 55, laterally restrain.

35 U.S.C. 103(b) Rejections

Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Christiansen et al. (U.S. 5,490,191) in view of Matzner et al. (U.S. 5, 384, 814).

In light of the discussion above, withdrawal of the rejection is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is in condition for allowance and applicants respectfully request such action.

If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By: 

William C. Gehris (Reg. No. 38,156)

Davidson, Davidson & Kappel, LLC
485 Seventh Avenue, 14th Floor
New York, New York 10018
(212) 736-1940